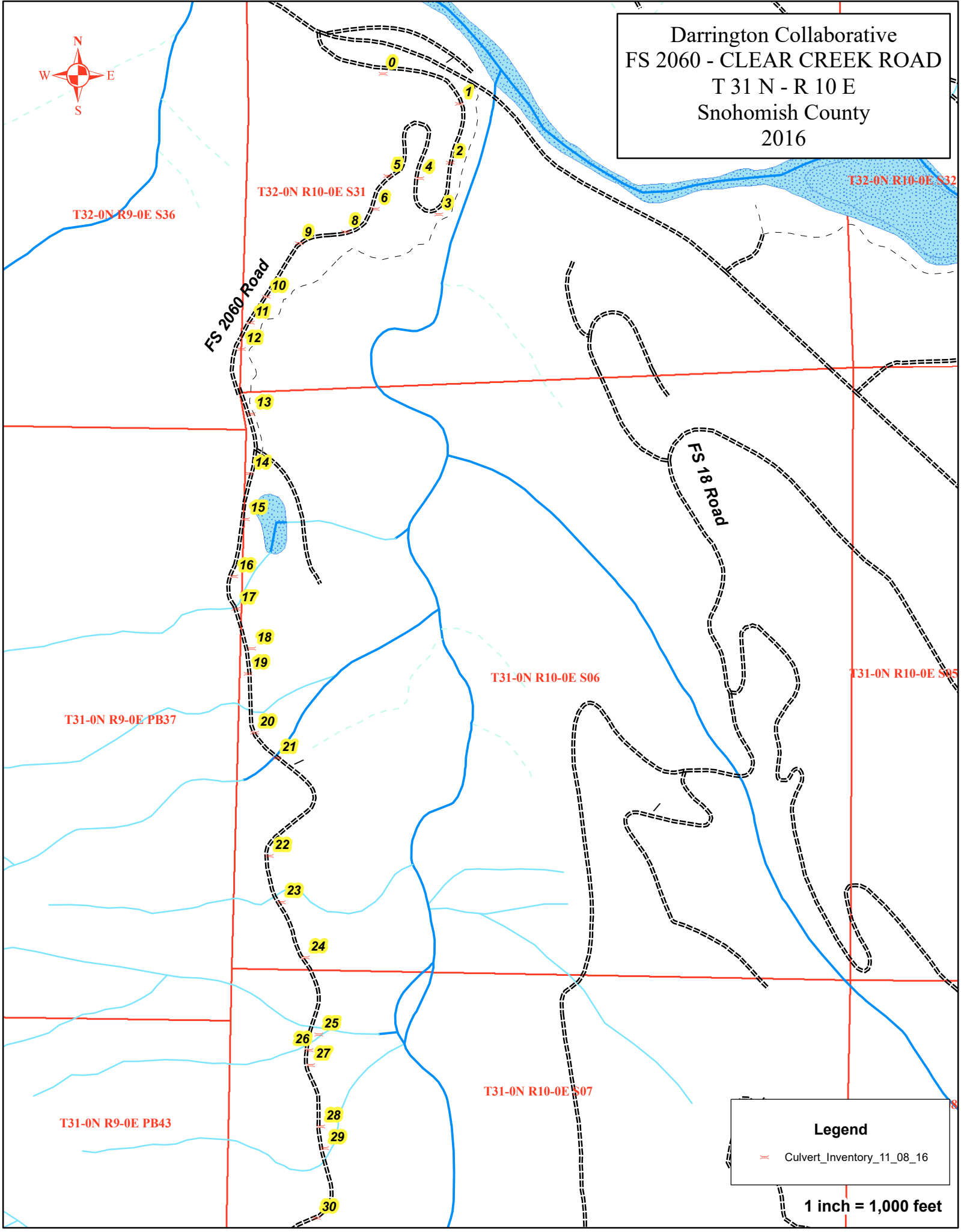




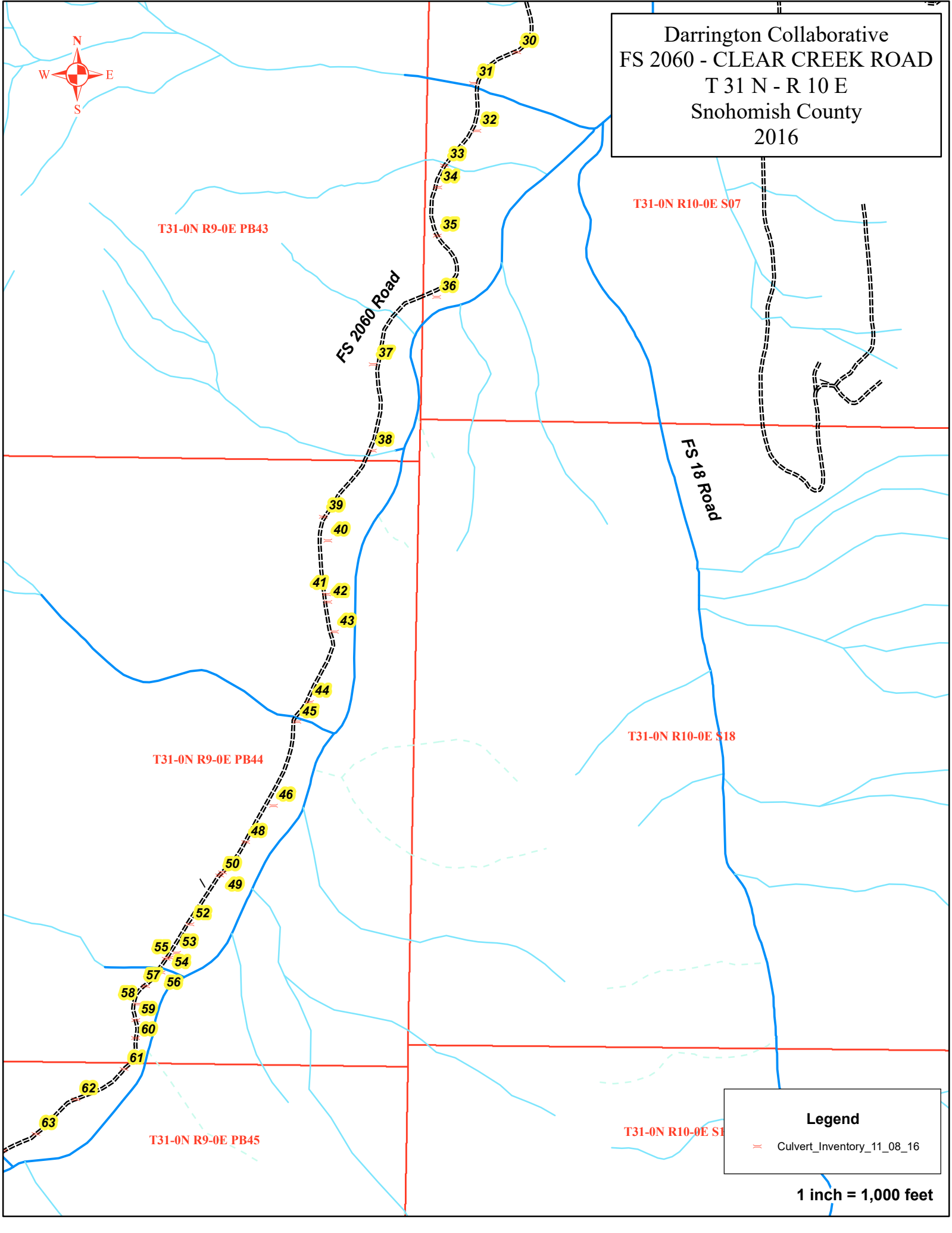
Darrington Collaborative
FS 2060 - CLEAR CREEK ROAD
T 31 N - R 10 E
Snohomish County
2016



Legend
Culvert_Inventory_11_08_16

1 inch = 1,000 feet

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T 31 N - R 10 E
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2016

T31-0N R9-0E S14

T31-0N R9-0E S23

T31-0N R9-0E S26

T31-0N R9-0E PB45

T31-0N R9-0E PB46

FS 2060 Road

Legend

≡ Culvert_Inventory_11_08_16

1 inch = 1,000 feet

POINT	Feature	H2O_Type	In_DIA	Connect to Stream	Length	Observed
0	seep	s			0	runs into & down ditch
1	CMP	R	18	N	0	holes in bottom of outlet
2	CMP	N	18	Y	0	pirating road water
3	CMP	S	18	Y	0	
4	CMP	R	18	N	0	weak ditch block
5	CMP	R	18	N	0	runs to Clear Creek
6	CMP	S	18	Y	0	
8	CMP	R	18	Y	0	
9	CMP	N	30	Y	0	outlet mostly buried
10	CMP	N	18	Y	0	
11	CMP	R	18	N	0	
12	CMP	N	18	Y	0	
13	CMP	R	18	N	0	
14	CMP	R	18	N	0	
15	CMP	R	18	N	0	
16	CMP	S	18	N	0	
17	FORD	N	ROCK	Y	0	
18	CMP	R	18	N	0	
19	FORD	N	ROCK	Y	0	
20	PP	R	18	N	0	
21	CMP	N	60	Y	0	potential F water downstream
22	CMP	R	18	N	0	
23	PP	N	24	Y	0	
24	CMP	N	24	N	0	
25	CMP	R	18	N	0	outflow blocked
26	wash	N			0	
27	PP	N	24	Y	0	
28	CMP	R	18	N	0	
29	CMP	N	18	Y	0	
30	CMP	R	18	N	0	
31	FORD	F	CONC	N	0	asbestos creek concrete ford
32	CMP	S	18	Y	0	
33	CMP	R	18	N	0	
34	CMP	S	18	N	0	
35	CMP	R	18	N	0	
36	CMP	R	18	Y	0	
37	CMP	R	18	N	0	
38	CMP	R	18	N	0	
39	CMP	R	18	N	0	
40	CMP	S	24	N	0	

POINT	Feature	H2O_Type	In_DIA	Connect to Stream	Length	Observed
46	CMP	R	24	N	0	
47	CMP	S	24	N	0	
48	CMP	N	36	Y	0	
49	CMP	S	36	N	0	
50	CMP	N	24	Y	0	
51	SURFACE				0	
52					0	
53	CMP	N	36	N	0	
54	CMP	N	24	Y	0	potential F water
55	CMP	F	48	N	0	undersized, H2O flows under
56	CMP	N	36	N	0	undersized
57	CMP	R	18	N	0	
58	CMP	N	24	Y	0	
59	CMP	S	18	N	0	
60	CMP	S	24	Y	0	
61	PP	F	36	Y	0	potential F above culvert
62	CMP	F	18	Y	0	undersized
63	CMP		24	Y	0	potential F water
64	PP	N	36	N	0	
65	CMP	N	60	N	0	
66	CMP	N	24	N	0	
67	CMP	S	18	N	0	
68	CMP			Y	0	
69	CMP	N	30	N	0	
70	PP	N	24	N	0	
71	CMP		24	N	0	
72	CMP	N	24	Y	0	
73	CMP	N	24	N	0	clean catchment basin
74	CMP	N	24	Y	0	plugged & perched
75	CMP	S	24	N	0	
76	CMP		24	N	0	

Forest Road Inventory Codes

Draft 6-17-13

Road comments: Record other relevant info that pertains to the segment. Examples include evidence of recent use or maintenance.

Drainage feature: Record the following attributes at every distinct road drainage feature, including culverts, water bars, ditch outs, and bridges.

Distance: Distance from segment beginning

Feature: Enter metal culvert (MC), plastic culvert (PC), ditch out (DO), water bar (WB), dip (DP), or other (specify)

Wtr Type: Enter fish stream (F), non-fish (N), seep (S), or road surface only (R)

Diameter: Enter original diameter in inches. For bridges enter span width.

Condition: This refers to degree of rust and damage to structure (inlet damage covered in next column). Good (G) indicates essentially no damage, Moderate (M), has significant wear or damage but is functional and Poor (P) is severely impaired or rusted through.

Obstruction: Where the inlet is obstructed, enter the percent blockage (nearest 10%) and obstructing material – Wood (W), Sediment, i.e. gravel or smaller (S), Rocks (R), or Damage (D). Obstructions in interior or outlet are not included under Condition.

Hillslope: Slope gradient below feature channel slope for Wtr Type of F or N, original hillslope for S or D.

Bankfull width and Diversion Potential are entered at channel crossings only. Enter (BF) width (in feet) based on measurement above road influence.

Diversion Potential: None (N), Short (<300' down road before crossing) or Long (>300')

Connected?: SI there evidence that road runoff is being routed to a stream, directly or via a gully? Enter Yes (Y), No (N) or Indeterminate (I).

Connected Length: Where Y or I are entered previously, enter the road length where runoff is being routed to a stream.

Comment: Enter other comments about the site.

For Features of Water Type F, enter gradient and outfall drop.

Other Features: In this box, record other features indicative of maintenance problems and past or potential erosion.

Start and End Dist: Record road distance (from beginning of segment) to beginning and end of feature.

Issue: Road surface features to be recorded include Rutted road (RR), Scoured road (RS), inadequate ditch (ID), cracking shoulder (SC), unstable cutslope (UC). Erosion features include Landslide (LS), or Gully (G) that began on the road or immediately downslope.

Delivery: Record delivery of erosion event to fish-bearing water as Demonstrated (D), Potential (P), None (N) or Indeterminate (I).

Comments: Because there are few required fields for 'other features', additional comments will be very important. For erosion events, indicate dimensions and approximate age if possible.

Note for all fields: if conditions don't fit reasonably into any categories, enter other (OT) and explain in comments.

Clear Creek Riparian Restoration Project: Forest Service Roads #2060 & 2065

Funded by Segelsen Stewardship\Forest Restoration Project

Location: Road 2060, Clear Creek Road, begins at the Mountain Loop Highway approximately 5 miles southeast of the Town of Darrington. Township 32 North, Range 10 East, section 31. It is approximately 8 miles to the junction of roads 2060 & 2065. Riparian/Road restoration as part of this project would occur on the road segment prior to the junction of roads 2060 & 2065

Current Road Conditions: The 2060 & 2065 roads are heavily used for recreational access. Large pot holes have developed in the lower (northern portion) of the road. Material continues to be eroded by vehicle traffic. Road ditches have filled in many places, lost capacity and now allow water to flow over the road and erode the surfacing. Road surface has scour channels in numerous places. Ditch drainage flows directly into creeks in numerous places. Impeded road drainage makes road surfacing & sub-grade more likely to saturate and possibly fail. It weakens the road and increases erosion from vehicle traffic. Natural debris flows from Jumbo Mountain periodically divert and flow down portions of road rather than the established channel. Existing road surface aggregate is fine gravel subject to erosion when heavy rain caused surface flows occur or from snow melt.

Project Goals: New large (probably 2.5"), durable, rock surfacing on the road to reduce erosion and to better infiltrate surface runoff. Ditches cleaned where necessary and configured such that road drainage does not flow into creeks. New plastic culverts¹ installed as necessary. Road dipped as necessary in places of historic (periodic) debris flows to reduce likelihood of flows diverting down road. (This helps maintain natural role and place of debris flows in adding complexity to streams from wood and rock inputs) General goal is to bring this National Forest Road up to standards. Overall goal is to minimize potential road system impacts on Clear Creek and restore natural water flows.

Social/Economic Justification: Clear Creek Road accesses several popular rock climbing areas (Witch Doctor Wall, Exfoliation Dome, Green Giant Butte and practice routes), 3 different hiking destinations (Squire Creek Pass, Deer Creek Pass & Copper Creek trail), fishing access to Clear Creek, general exploring/scenic view driving and hunting/gathering/dispersed camping). It is also popular for winter Nordic skiing & snowshoeing. Because of its proximity to the Town of Darrington and ease of access via a paved portion of the Mountain Loop Highway, maintaining the road for popular recreational use is important to the local economy. The access it provides is a visitor draw and well known local amenity. Heavy use of the road will also enable the Darrington Collaborative to showcase its achievements. There will be opportunities to storyboard how forest restoration stewardship projects help benefit forest, riparian, human and community health.



¹ plastic culverts, properly installed, have a service life of approximately 100 years and a lower coefficient of friction to better pass debris flows